



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

December 11, 2013

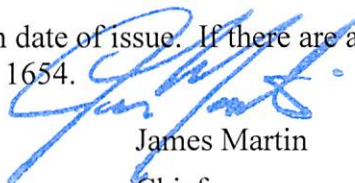
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-2102324, issued to EQT PRODUCTION COMPANY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: 159821 (J.D. SMITH #11645)

Farm Name: WV PUBLIC LAND CORP.

API Well Number: 47-2102324

Permit Type: Plugging

Date Issued: 12/11/2013

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

CK 16904
\$100⁰⁰

2102324P

Date: November 22, 2013
Operator's Well
Well No. 159821 (J.D. Smith #11645)
API Well No.: 47 021 - 02324

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil _____ Gas X Liquid Injection _____ Waste Disposal: _____
If Gas, Production _____ X _____ Or Underground storage _____ Deep _____ Shallow X
- 5) Elevation: 1003' Watershed: Lower Run of Little Kanawha River
Location: Dekalb 02 County: Gilmer 21 Quadrangle: Tanner 7.5' 634
District: _____
- 6) Well Operator EQT Production Company
120 Professional Place
Address: Bridgeport, WV 26330
- 7) Designated Agent: Rex C. Ray
Address: 120 Professional Place
Bridgeport, WV 26330
- 8) Oil & Gas Bryan Harris
Name: P.O. Box 157
Address: Volga, WV 26238
- 9) Plugging Contractor:
Name: HydroCarbon Well Service
Address: PO BOX 995
Buckhannon, WV 26201

- 10) Work Order: The work order for the manner of plugging this well is as follows:

See Attachment for details and procedures.

RECEIVED
Office of Oil and Gas

DEC 05 2013

WV Department of
Environmental Protection

OFFICE USE ONLY

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector

Bryan Harris

Date 12-4-13

PLUGGING PROGNOSIS - Weston

Smith, J.D. # 11645 (159821)

GILMER, COUNTY, WEST VIRGINIA

API # 47-021-02324

DeKalb District

BY: Craig Duckworth

DATE: 10/28/13

CURRENT STATUS:

ELEV: 1003'

8 5/8" csg @ 415'

4 1/2" csg @ 1988' (150 sks cement)

TD @ 2044'**Fresh Water @ 120'****Salt Water @ None reported****1st Salt Sand @ 1589'****Coal @ None reported****Gas shows @ 1928'-1941' Big Injun****Oil Shows @ None Reported****Stimulation: Fractured Perfs. @ 1940'-1930'**

1. Notify State Inspector, **Bryan Harris 304-553-6087**, 24 hrs. Prior to commencing operations.
2. TIH w/ tbg @ 1988'; Set 200' C1A Cement Plug @ 1988' to 1788' (gas show@ 1928'-1941') ✓
3. TOO H w/ tbg, Free Point 4 1/2", cut 4 1/2" @ free point, TOO H w/ 4 1/2" csg
4. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 4 1/2" cut.
Do not omit any plugs.
5. TIH w/ tbg @ 1589'; Set 100' C1A Cement Plug @ 1589' to 1489' (Salt Sand @ 1589') ✓
6. TOO H w/ tbg @ 1489'; gel hole @ 1489' to 465'.
7. TOO H w/ tbg @ 465'; Set 100' C1A Cement Plug @ 465' to 365' (8 5/8" @ 415')
8. TOO H w/ tbg @ 365'; gel hole @ 365' to 200'
10. TOO H w/ tbg @ 200'; Set 200' C1A Cement Plug @ 200' to Surface
11. Top off as needed
12. Set Monument to WV-DEP Specifications
13. Reclaim Location & Road to WV-DEP Specifications

RECEIVED
 OFFICE OF THE ATTORNEY GENERAL
 DIVISION OF OIL AND GAS
 10/29/13
 DIVISION OF OIL AND GAS



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED
JAN 8 1974

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD

39-00
4-21
US
Glenville
Quadrangle 24-43-3
Permit No. GIL-2321

Rotary XX Oil
Cable Gas XX
Recycling Comb.
Water Flood Storage
Disposal (Kind)

Company Consolidated Gas Supply Corporation
Address Clarksburg, W. Va.
Farm J. D. Smith Acres 3/475.75
Location (waters) L/R of Little Kanawha River
Well No. 11645 Elev. 1013'
District DeKalb County Gilmer
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling Commenced 6-6-73
Drilling Completed 6-11-73
Initial open flow 1.3 M cu. ft. bbls.
Final production 50.9 M cu. ft. per day bbls.
Well open 14 days hrs. before test 230# RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"	20'	20'	To surface
9 5/8			
8 5/8	115'	115'	To surface
7			
5 1/2			
4 1/2	1988'	1988'	150 bags
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Well fractured 7-17-73 with 600 bbl water, 50,000# sand and 500 gal acid (15%)

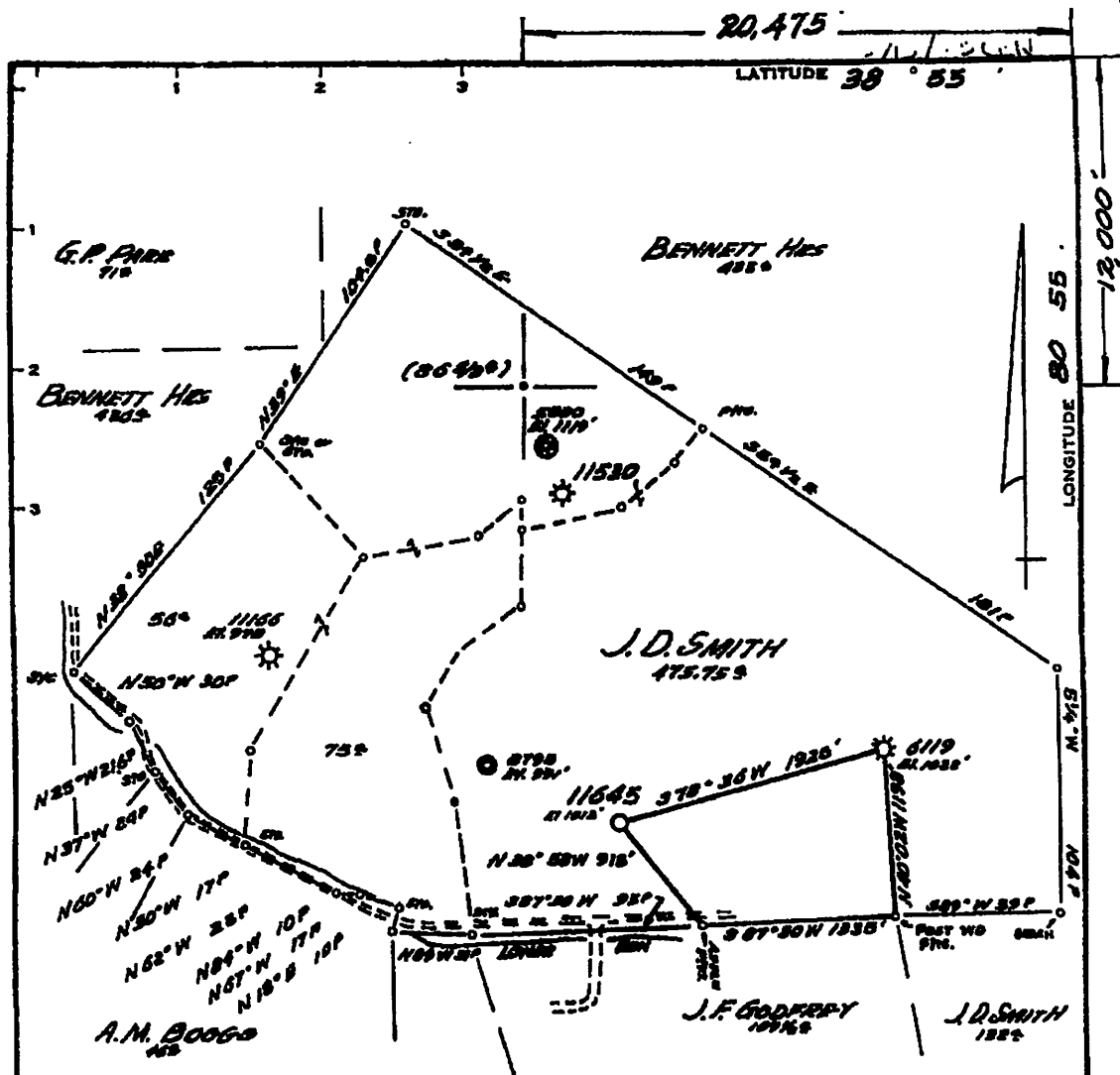
Perforations: 1930-110'

Coal was encountered at None Feet Inches
Fresh water 120' Feet Salt Water None Feet
Producing Sand IN RUN Depth 1930-110'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale & Red Rock			0	360	Water	120' Fresh
Sand & Shale			360	1589		
Salt Sand			1589	1675		
Shale			1675	1689		
Maxton Sand			1689	1756		
Little Lime			1756	1797		
Big Lime			1797	1888		
Big Injun			1888	1961	Gas	1928-111'
Total Depth				2014'		
Consolidated Gas Supply Corporation 1145 West Main Street Clarksburg, W. Va.						

(over)

* Indicates Electric Log tops in the remarks section.



Minimum Error of Closure 1' in 200'

Source of Elevation LEVELS from CONSOLIDATED GAS
SUPPLY CO. WELL 6119 ELEV 1022'

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

New Location ☒
Drill Deeper ☐
Abandonment ☐

MAP SHEET 96 520 W22 FEB 1921 PG. 24-36

Company CONSOLIDATED GAS SUPPLY CO.
Address CLARKSBURG, W.Va.
Farm J.D. SMITH
Tract _____ Acres 12.5 Lease No. 20479
Well (Farm) No. _____ Serial No. 11645
Elevation (Spirit Level) 1012'
Quadrangle GREENVILLE, W.Va. WC.
County CLARK Dist. CLARK
Engineer JACKSON M. JARVIS
Engineer's Registration No. 2397
File No. _____ Drawing No. _____
Date 2-7-23 Scale 1" = 60 FEET

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

FILE NO. 61-2324

- Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

-- Denotes one inch spaces on border line of original tracing.

47-021

1) Date: November 22, 2013
2) Operator's Well Number
159821 (J.D. Smith #11645)
3) API Well No.: 47 021 - 02324
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
NOTICE AND APPLICATION TO PLUG AND ABANDON WELL

4) Surface Owner(s) to be served:
(a) Name West Virginia Public Land Corp. ✓
Address Real Estate Div/Chuck Lawrence Dir.
900 Pennsylvania Ave.
Charleston WV 25302
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Bryan Harris ✓
Address P.O. Box 157
Volga, WV 26238
Telephone 304-553-6087

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration ✓
Name see attached sheet
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name None
Address _____

TO THE PERSONS NAMED ABOVE:

You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator:

By:

Its:

Address:

Telephone:

EQT Production Company

Victoria J. Roark

Permitting Supervisor

PO Box 280

Bridgeport, WV 26330

(304) 848-0076

Subscribed and sworn before me this

22

day of

November

2013

Notary Public

My Commission Expires:

Aug. 24, 2022

The Office of Oil & Gas processes your personal information, such as name, address and phone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer.



SURFACE OWNER WAIVEROperator's Well Number: 159821 (J.D. Smith #11645)**INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW 4-A**

The well operator named on page WW4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Division of Environmental Protection
601 57th Street, SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments.

the date the operator files for this Application. You have comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

The law requires these materials to be served on or before

FIVE (5) DAYS

after the filing date to file your

Comments must be in writing.

Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

List of Water Testing Laboratories.

The office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For a Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION

RECEIVED

Lucille S. Lavin
Signature

Date 12-2-13

Name

DEC 03 2013

By

Its

WV Department of
Environmental Protection

Signature

Date

2963 Winters Road
Huntington, WV 25702
(304) 525-7572

21.02324 P

Operator's Well Number: 159791 (J.D. Smith #6119)

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

The well operator named on the attached page WW-4(B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the date on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on the obverse side of this application

Note: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

The undersigned operator _____ / owner ✓ / lessee _____ of the coal under this well location has examined this proposed plugging work order. The undersigned has not no objection to the work proposed to be done at this location, provided the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 12-2-13

By: Lucille L. Linn
Its: _____

RECEIVED
Office of Oil and Gas

DEC 03 2013

Department of
Environmental Protection

WW-9
Revised 2/03

Page ____ of ____
2) Operator's Well Number
159821 (J.D. Smith #11645)
3) API Well No.: 47 021 - 02324

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name: EQT PRODUCTION COMPANY OP ID: _____

Watershed: Lower Run of Little Kanawha River Quadrangle: Tanner 7.5'

Elevation: 1003' County: Gilmer District: Dekalb

Description of anticipated Pit Waste: Formation Fluids

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes___ No X

Will synthetic liner be used in the pit? Yes Is so, what ml.? 30 ml

Proposed Disposal Method for Treated Pit Wastes:

- ☒ Land Application
☐ Underground Injection - UIC Permit Number _____
☐ Reuse (at API Number) _____
☐ Offsite Disposal Permit #. _____
☐ Other: Explain _____

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. _____

If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used? _____

Will closed loop system be used? _____

Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc. _____

If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust _____

Landfill or offsite name/permit number? _____

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

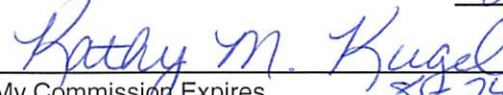
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

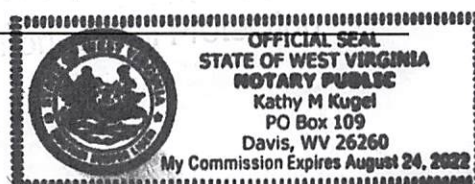
Company Official Signature 

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

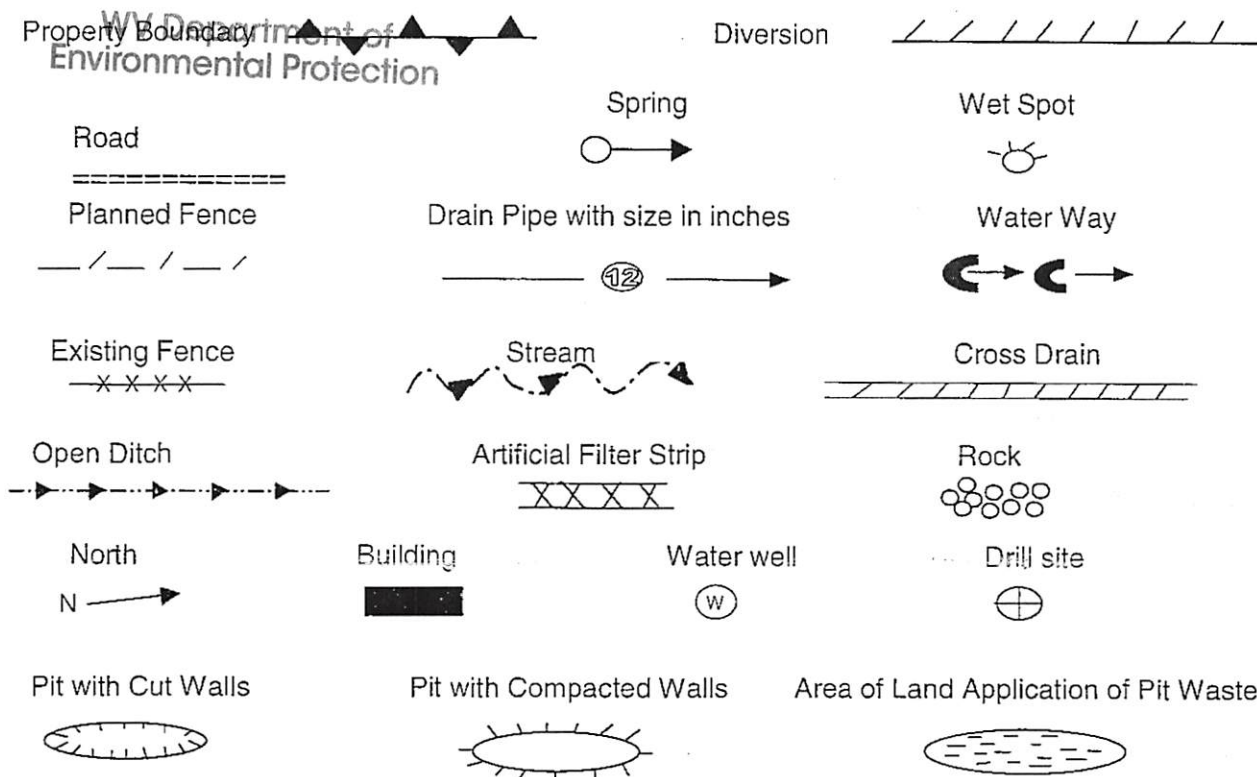
Subscribed and sworn before me this 22 day of November, 2013

 Notary Public
My Commission Expires 8-24-2022



DEC 05 2013

LEGEND



Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH 5.8

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre or hydroseed.

SEED MIXTURES

Area I

Seed Type	lbs/acre
KY-31	40
Alsike Clover	5
Annual Rye	15

Area II

Seed Type	lbs/acre
Orchard Grass	15
Alsike Clover	5

ATTACH:

Drawing(s) of road, location, pit and proposed area for land application.
Photocopies section of involved 7.5' topographic sheet.

Plan approved by: Bryan Hume

Comments: _____

Title: Oil & Gas Inspector Date: 12-4-13

Field Reviewed? X Yes No

2102324A

Topo Quad: Tanner 7.5'Scale: 1" = 2000'County: GilmerDate: October 29, 2013District: DekalbProject No: 25-19-00-07

WV 159821 47-021-02324 (J.D. Smith #11645)

Topo



SURVEYING AND MAPPING SERVICES PERFORMED BY:

ALLEGHENY SURVEYS, INC.

1-800-482-8606
P.O. BOX 438
BIRCH RIVER, WV 26610
PH: (304) 649-8606
FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

P.O. Box 280
Bridgeport, WV 26330

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-021-02324 WELL NO.: WV 159821 (J. D. Smith #11645)

FARM NAME: J. D. Smith

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Gilmer DISTRICT: Dekalb

QUADRANGLE: Tanner 7.5'

SURFACE OWNER: State of West Virginia (Division of Natural Resources)

ROYALTY OWNER: J. D. Smith, et al.

UTM GPS NORTHING: 4303753

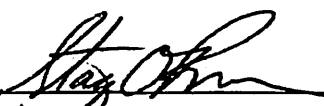
UTM GPS EASTING: 501046 GPS ELEVATION: 305 m (1003 ft)

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:
Survey grade GPS ____ : Post Processed Differential ____
Real-Time Differential ____
Mapping Grade GPS X : Post Processed Differential X
Real-Time Differential ____

4. Letter size copy of the topography map showing the well location.

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

 PS # 2180
Signature Title
11/6/13
Date



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY

LEASE NAME AND WELL No. J. D. Smith #11645 WV 159821 (47-021-02324)

POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 159821.

BIRCH RIVER OFFICE

P.O. Box 438 • 237 Birch River Road
Birch River, WV 26610
phone: 304-649-8606
fax: 304-649-8608

BRIDGEPORT OFFICE

172 Thompson Drive
Bridgeport, WV 26330
phone: 304-848-5035
fax: 304-848-5037

CALDWELL OFFICE

212 Cumberland Street
Caldwell, OH 43724
phone: 740-305-5007
fax: 740-305-5126

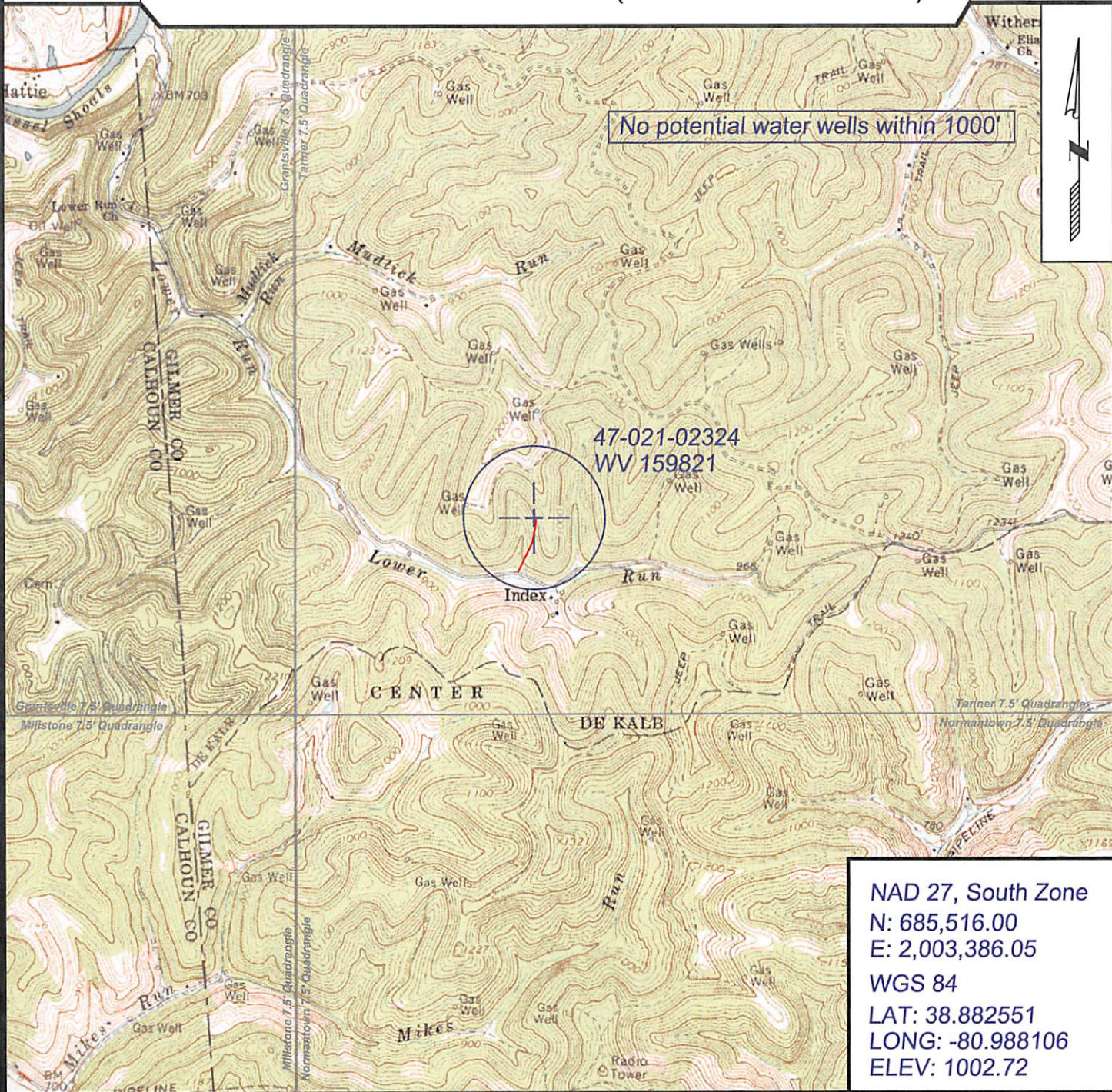
ALUM CREEK OFFICE

P.O. Box 108 • 1413 Childress Road
Alum Creek, WV 25003
phone: 304-756-2949
fax: 304-756-2948

Topo Quad: Tanner 7.5' Scale: 1" = 2000'
 County: Gilmer Date: October 29, 2013
 District: Dekalb Project No: 25-19-00-07

Water

WV 159821 47-021-02324 (J.D. Smith #11645)



NAD 27, South Zone
 N: 685,516.00
 E: 2,003,386.05
 WGS 84
 LAT: 38.882551
 LONG: -80.988106
 ELEV: 1002.72



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 P.O. BOX 438
 BIRCH RIVER, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330